

UNDERGROUND STORMWATER MANAGEMENT CONSTRUCTION SPECIFICATIONS

A. Site Preparation

Areas under the culverts, structural works, and stream diversion shall be cleared, grubbed, and the topsoil stripped to remove all trees, vegetation, roots, or other objectionable material.

B. Specification for Corrugated Steel Pipe

DESCRIPTION:

The Aluminized Type II corrugated steel shall be fabricated in accordance with AASHTO designation M-274 from a base metal manufactured in accordance with ASTM A-525 coated uniformly on both sides with 1.00 oz/sq. ft. of pure aluminum.

MATERIAL:

The _____ diameter corrugated metal pipe shall be of the corrugation design and gage indicated. The steel pipe, couplers and fittings shall conform to the requirements of AASHTO M-36 with the pipe having a _____ x _____ corrugation profile and shall be a minimum _____ gage (0._____). The coupling bands shall be the same material as the pipe and shall be a minimum of 10-inches wide. The corrugated metal pipe shall be manufactured with continuous lockseam or butt welded helical corrugations and having no less than two annular corrugations rerolled at both ends of any length of pipe. Coupling bands shall be formed with two corrugations that are spaced to provide seating in the second rerolled corrugation of each pipe end, and pipe ends shall be matched and numbered. Coupling bands shall be per the approved plans. All Aluminized surfaces that will be in contact with concrete shall be painted with one coat of zinc chromate primer.

C. Installation

The corrugated metal pipe shall be handled in a manner not to damage the pipe or coating. Bedding and backfill material shall be selected, granular material and shall be free of rocks and hard clods larger than 3-inches in size. The bedding and backfill material shall be carefully placed and consolidated evenly on both sides of the pipe in maximum 8-inch loose lifts. The Ph of the surrounding soil shall be less than (9) and greater than (4).

The material must completely fill all spaces under and adjacent to the structure or pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of the structure. Under no circumstances shall the contractor drive equipment over a concrete structure or pipe unless there is a compacted fill of 24-inches or greater over the structure or pipe.

Contractor shall be responsible for providing adequate shoring of trench walls to prevent failure during construction.

D. Connections

All connections shall be completely water tight. This includes all endcaps, pipes, connections to and from concrete control structure and all connections from storm drainage system. See material specifications above.